



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------|-------------|----------------------|---------------------|------------------|
| 10/676,629 | 10/01/2003 | Herbert Bachler | 36162 | 7839 |
| 116 | 7590 | 04/17/2008 | EXAMINER | |
| PEARNE & GORDON LLP | | | SAUNDERS JR, JOSEPH | |
| 1801 EAST 9TH STREET | | | | |
| SUITE 1200 | | | ART UNIT | PAPER NUMBER |
| CLEVELAND, OH 44114-3108 | | | 2615 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 04/17/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/676,629 | BACHLER, HERBERT | |
| | Examiner | Art Unit | |
| | Joseph Saunders | 2615 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 14 January 2008.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-3,7,9,10,12 and 13 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-3,7,9,10,12 and 13 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 01 March 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

1. This office action is in response to the communications filed January 14, 2008.

Claims 1 – 3, 7, 9, 10, 12, and 13 are currently pending and considered below.

Claim Objections

2. Claim 7 is objected to because of the following informalities: It is noted for the record that the status identifier for claim 7 states "(previously presented)" however amendments are present and therefore the status identifier should state "(currently amended)". Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1 – 3, 7, 9, 10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hohmann et al. (US 7,013,015), hereinafter Hohmann, in view of Dr. Ross on Hearing Loss Acoustic Feedback Control, hereinafter Ross.

Claim 1: Hohmann discloses a hearing system comprising at least one ear-applicable hearing device with an input acoustical/electrical converter arrangement (Figure 1 and 2), said system being controllably operable in a first desired stable operating status

(normal operating status with narrow-band notch filters deactivated) and in at least one second desired stable operating status (operating status with narrow-band notch filters activated for reducing feedback) comprising a sensing unit sensing operating stability and operating instability of an acoustical feedback loop including said hearing device applied to an individual (oscillation detector 15, comparison unit 16, and control unit 17), said sensing unit controlling change over from said one desired to said at least one second desired operating status whenever instability of said feedback loop is sensed (Colum 6 Lines 6 – 40).

Hohmann does not explicitly state that said instability is willingly established by said individual at a desired moment and removed by said individual at a second desired moment so as to control said change over by the willingly applied instability during the time span between said second and said first moment.

Further, it is again noted that the limitations of said instability being willingly established by said individual so as to control said change over from a first to a second desired operating status applies to how the user operates the hearing aid and not on the hearing aid system itself. Regardless, Ross discloses in a hearing aid, “anything that facilitates the feedback cycle will increase the chances of feedback, such as placing one’s hand next to the hearing aid (often while adjusting the volume control), raising one’s coat collar or pulling down a stocking cap on a cold day, standing too close to a wall or resting one’s head on a pillow, and using a telephone without a telephone coil. In these cases, the aid may be set just below the feedback point, but with the addition of these enhancement factors enough sound is reflected back into the microphone for the

feedback cycle to commence," last bullet on page 2. Ross then continues to teach that when feedback occurs, it is desirable to eliminate or reduce its occurrence.

Therefore, given the teachings of Hohmann regarding a hearing aid designed to reduce feedback; it would have been obvious to one of ordinary skill in the art at the time of the invention given the teachings of Ross that during the use of Hohmann's hearing aid for an individual to willingly establish an instable condition (e.g. while adjusting the volume control), thereby causing the hearing aid of Hohmann to change operating status and meeting the limitations of the claimed invention.

Claim 2: Hohmann and Ross disclose the system of claim 1, wherein said instability of said feedback loop is established by said individual by manually applying a member adjacent to and/or to said hearing device (Ross, last bullet on page 2).

Claim 3: Hohmann and Ross disclose the system of claim 2, wherein said member is a hand (Ross, last bullet on page 2).

Claim 7: Hohmann and Ross disclose the system of claim 1, Hohmann further comprising a second hearing device (hearing device 11') operationally connected to said at least one ear-applicable hearing device (hearing device 11) by a communication link (signal path 17), wherein said first and second desired operating status comprise status of at least one of said hearing devices and said communication link (hearing device 11 and 11' have operating statuses pertaining to notch filters activated and notch

filters deactivated at different frequencies and the operating status of each hearing aid device is conveyed on the communication link for comparison, Column 6 Lines 11 – 18).

Claim 9: Hohmann and Ross disclose the system of claim 1, wherein said at least one hearing device is an outside-the-ear hearing device or an in-the-ear hearing device or a completely-in-the-canal hearing device ("The invention can be employed in all standard types of hearing aid devices, for example, given hearing aid devices to be worn behind the ear, hearing aid devices to be worn in the ear, implantable hearing aid devices or pocket devices," Hohmann Column 3 Lines 18 – 21).

Claim 10: Hohmann and Ross disclose the system of claim 1, wherein said at least one hearing device is a hearing aid device ("The invention can be employed in all standard types of hearing aid devices, for example, given hearing aid devices to be worn behind the ear, hearing aid devices to be worn in the ear, implantable hearing aid devices or pocket devices," Hohmann Column 3 Lines 18 – 21).

Claim 12: Hohmann discloses a method for manually controlling a hearing system with a hearing device, comprising the steps of:
providing the hearing device (Figures 1 and 2), wherein the hearing device is worn by an individual ("The invention can be employed in all standard types of hearing aid devices, for example, given hearing aid devices to be worn behind the ear, hearing aid devices to be worn in the ear, implantable hearing aid devices or pocket devices,"

Column 3 Lines 18 – 21); and changing a desired operating mode of the hearing device upon sensing the instable operating mode (changing from normal operating status with narrow-band notch filters deactivated to an operating status with narrow-band notch filters activated for reducing feedback, Column 6 Lines 6 – 40).

Hohmann does not explicitly state willingly establishing, by the individual, an instable operating mode of the hearing device. However, Ross discloses in a hearing aid, “anything that facilitates the feedback cycle will increase the chances of feedback, such as placing one’s hand next to the hearing aid (often while adjusting the volume control), raising one’s coat collar or pulling down a stocking cap on a cold day, standing to close to a wall or resting one’s head on a pillow, and using a telephone without a telephone coil. In these cases, the aid may be set just below the feedback point, but with the addition of these enhancement factors enough sound is reflected back into the microphone for the feedback cycle to commence,” last bullet on page 2. Ross then continues to teach that when feedback occurs, it is desirable to eliminate or reduce its occurrence.

Therefore, given the teachings of Hohmann regarding a hearing aid designed to reduce feedback; it would have been obvious to one of ordinary skill in the art at the time of the invention given the teachings of Ross that during the use of Hohmann’s hearing aid for an individual to willingly establish an instable condition (e.g. while adjusting the volume control), thereby causing the hearing aid of Hohmann to change operating status and meeting the limitations of the claimed invention.

Claim 13: Hohmann and Ross disclose the method of claim 12, wherein the instable operating mode is established by manually applying a member adjacent to and/or to said hearing device (Ross, last bullet on page 2).

Response to Arguments

5. Applicant's arguments with respect to claims 1 – 3, 7, 9, 10, 12, and 13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Saunders whose telephone number is (571) 270-1063. The examiner can normally be reached on Monday - Thursday, 9:00 a.m. - 4:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S./
Examiner, Art Unit 2615
April 11, 2008

/Sinh N Tran/
Supervisory Patent Examiner, Art Unit 2615